



Regional Research Vessels

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Session 3 : Set-up common procurement strategies, develop common business models



Regional Research Vessels

Outline

- Definition** of Regional Research Vessel
- Regional Research Vessels as **opportunity**
- Regional Research Vessels **limitations**
- Toward a **EU network** of RRV
- RRV as a key to **minimize costs** of marine research
- RRV and shared protocols

 Summary

Definitions of Regional Vessel

A Vessel is defined as “regional”:

- Based on **size/class of the vessel** and/or contract with crew (and consequent restriction to work in the Ocean)
- Based on the **area of main activity** (somewhat limited)
- Based on distance and consequent costs of long transit times (i.e.: a large ship in the Black Sea is regional *de facto*)



... most ships are regional

Regional Vessels as an opportunity

- They are typically multi-purpose and can adapt to host variable payloads
- They can carry out reconnaissance work and hence prepare the ground to more targeted cruises by more specialised (and expensive) ships
- They allow the opportunity to share the same instrumentations in different regions through a shared schedule of activities
- They can respond rapidly to “events” both of natural or anthropogenic origin (in contrast to larger vessels that have complex schedules on global scale)





Regional Vessels “limitations”

- Vessels from different nations that have overlapping work areas may end up with unnecessary duplication of surveys
 - Smaller Regional Vessels are more impacted by weather conditions. Cost is small compared to larger vessels but effectiveness of costs should be evaluated
 - In some cases limitation to H24 use (peculiar agreements with owners; contracts that limit work on weekends)
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Toward a EU network of Regional Vessels

- **Repeated surveys** to observe inter-annual variability of a given oceanographic process
- **Rapid Environmental Assessments** (i.e.: a major oil spill faced by the vessel that is closer to the area)
- Maintain survey costs proportional to value of the instrumentation employed (i.e.: avoid using a major oceanic vessel just to shoot a 2D conventional chirp-sonar survey)



Regional Vessels as a key to reduce global costs of marine operations

- Trans-national use of vessels and reduction of transit costs
- Shared instrumentations among different vessels
- Shared expertise of crews, officers and technicians
- Assist observation networks at regional scale
 - Help maintain fixed observing stations
 - Help turn over of ad hoc mooring stations
- Assist deep-sea observing systems



Regional Research Vessels and shared protocols

- Standardise choice/use of equivalent instruments on different ships (research teams find similar practical solutions on different ships)
- Multi-purpose host platforms with solid solutions for handling instruments from guest teams
- Construct data base of available vessels by
 - Main characteristics
 - Main area of work (both planned cruises and real time location)



Instrumentation that can be shared and related teams

Summary

- A EU network of Regional Research Vessels can provide a firm basis for integrated marine research
- If basic structural requirements are satisfied (including dynamic positioning, A-frames, hull-mounted instrumentation) mission-specific instrumentations can be shared among RRV
- Eurofleet represented a fundamental step in this direction and should be enlarged with increased attention to the possibility to interchange payloads among vessels from different Countries

